14: Thomson G-3 (1886-1891) 1894
OU9 Tonga OU9

is a female bull (*koe bula fefine*). D'Entrecasteaux, who visited Tonga fourteen years after Cook, found that the existence of the cattle left by that navigator was so far forgotten that the natives did not know which island they were on, if indeed they were alive at all. They were then spoken of as *puaka tute* (Cook's pigs). Cook himself records the fact that the new animals excited but little interest. This indifference still survives in the unwillingness of the people to keep cattle, in spite of the excellent pasture in the island and the large profits to be made from the sale of milk. Almost every Tongan owns a horse; scarcely half a dozen keep cows. A cow cannot be ridden, and it must be watered and milked with absolute regularity or it will run dry; and of all the products of civilisation, regular routine is the most hateful to the Polynesian.

I have spoken elsewhere of horses. The ancestors of the present breed were brought from New Zealand some forty years ago, but through promiscuous breeding they have dwindled to the size of the American mustang,—hard wiry ponies, without either mouth or paces, full of tricks and ill-temper, but capable of covering immense distances without fatigue. They vary in price from a few shillings to £7 or £8. The Government might easily have improved the breed by making gelding compulsory, or by enforcing the horse-tax; as it is, the country is overrun with wretched beasts, covered with sores, whose only use is to keep the grass short. I remember one of the police magistrates applying to the Government for an impounded horse,—"not that I may ride it, but because I am old, and there is no one to weed my enclosure."

21: Simkin U-5 (no date) 1945 0U9 Tonga 0U9

From the standpoint of his own needs, therefore, the Tongan is an efficient enough farmer, but if European standards are considered his farming leaves much to be desired.

One of the first things to impress the outsider is the enormous waste of land, for, apart from a few clearings for the food plants, the farm is largely given over to prolific weeds. Equally glaring are the primitive methods of cultivation. Machetes, spades, push hoes, and an occasional fork are the only implements used, and no appreciation is shown of the use of animal manure or of any other fertiliser. Reflection will suggest, however, that these conditions may not be entirely due to agricultural backwardness. Intensive cultivation would exhaust the soil, and in the absence of local supplies fertilisers would cost more money than the Tongan could afford. Weeds may rob the soil of moisture, but they do not exhaust its fertility and have at least the merit of preventing soil erosion. Undoubtedly much more could be produced from the average farm, but probably only if fertilisers, cattle and implements were provided on a scale beyond the resources of most farmers.

To a certain extent the general faults of Tongan farming may be excused. It is less easy to justify the defects of its particular branches, apart from a recognition that they may arise not so much from a lack of ability or energy as from a lack of agricultural training and capital. Many of the crops and especially fruit are ravaged by serious diseases and pests, which the farmer does little to control beyond avoiding to plant obviously damaged material. The copra is of relatively poor quality, commanding inferior export prices because it is produced, harvested, and dried in a very haphazard way. The Tongan usually gathers it only when he needs money for some specific purpose, and this casual attitude, together with the infestation of weeds about the trees, leads to a considerable wastage of nuts. There are few hot-air driers in use, the greater part of the crop being rather carelessly sun-dried.

Perhaps the worst of the Tongan farming is animal husbandry. Not only is the stock inadequate and of poor quality, it is also badly cared for. Systematic efforts to provide feed are rare, the animals being left to forage for themselves. It is not surprising that they are scraggy creatures, too often suffering from serious diseases. Tuberculosis is particularly rife in both cows and pigs. There is little attempt either to control these diseases or to improve the stock by breeding.

39: Gerstle & Raitt C,Q-4,5 (1952-1972) 1974 OU9 Tonga OU9

654
242
252
142
891
342

The Government Experimental Farm in Vaini, Tongatapu, conducts experiments with livestock, soil, fertilizer, weed killers and crop rotation to improve agricultural techniques and production in Tonga. Photo above shows 'Otenili Tu'ipulotu (at right), the Farm Manager, and Saia Fia in the piggery at the Government Experimental Farm.

Faama 'Ahi'ahi 'a e Pule'anga 'i Vaini. 'Oku fai ai e ngaahi sipinga ngoue mo e tauhi manu kehekeha ke tokoni ki he fakalaka 'a e ngaue ki he kelekele. Ko e ta eni 'o e Pule Faama ko 'Otenili Tu'ipulotu (to'omata'u) pea mo Saia Fia 'i he fale fanga puaka 'i Faama.

235 654 hatchery to sell day-old chicks to farmers at half the current price of imported stock and the construction of slaughtering facilities at the Government Farm in Vaini.

233 654 The Cattle Subsidy Scheme, which was initiated in 1972, is a long-term project designed to make Tonga self sufficient in beef production. The Scheme subsidizes barbed wire fencing, a reticulated water system, and the clearance of land; it plans to distribute heifer calves at a subsidized price to members of the Scheme who meet minimum standards. The minimum size allotment required for membership in the scheme is 4 acres, although as of December 1971, 35 farmers who had been accepted by the Scheme had allotments averaging the standard 8 1/4 acres (Department of Agriculture, 1971:37-38).

233 654 246 Also under the Cattle Subsidy Scheme is a pasture improvement program, under which sirato (Phaseolus atropurpureus), pangola grass (Digitaria decumbens), Para grass (Brachiaria mutica), and elephant grass (Pennisetum purpureum) have been introduced (Nusbaum, 1972).

232 231 654 [439] In addition to these primary schemes, the Department of Agriculture has also imported Santa Gertrudis, Hereford, and Friesian bulls and other cattle as well as high quality pig breeding stock to upgrade local stock through "Honeymoon Schemes" where farmers bring their animals to the Government Farm to be mated to these animals. In another program, stallions are taken to villages where they are bred to local

231 mares to upgrade the standard of work horses in the Kingdom.
232
654 Owing to the rapid elimination of native forest species
654 on Tongatapu, as a result of the need for firewood and
245 timber for banana shooks and other purposes, the Agriculture
318 Department has a limited reforestation program, which
[313] includes nurseries at Sopu on Tongatapu and on 'Eua and the issuance of seedlings to interested allotment holders. The major species which have been planted by individual allotment holders have been Casuarina equisitefolia, Eucalyptus spp., and Grevillea robusta, all natives of Australia, and the tropical American Cedrela odorata. The only major reforestation project in the Kingdom has been conducted on 'Eua, where 200 acres of Pinus caribaea have been successfully established (Government of Tonga, 1971c:26). On Tongatapu, there are only limited cases where farmers have planted introduced forest species on their allotments.

241 In conclusion, the overall effect of the recent
231 introductions of new techniques and plant and animal
179 material on the Tongan agricultural system seems to have been minimal. This is in spite of considerable subsidies
241 offered by government agencies and a recently expanded
231 agricultural extension program, yearly agriculture shows,
654 a system of "Rural Broadcasting" designed to improve agri-
207 cultural education over the radio, the establishment of a
179 Government Agricultural Training Center at the Experimental Farm in Vaini, and a continued overall effort by the Agri-

/170 cont./

262 Most chiefs probably eat less pork than they did in former times. (451)

451. Ibid., p. 187.

231 177 262 574 Since Christianization and democratization of the Archipelago has very much reduced the number of large festivals at which huge quantities of pork were consumed. (452)

452. See Th. West, Ten years.../cited in English/ p. 123.

it may be taken for granted that pig breeding as a whole is considerably less than it was in ancient Tonga.

231 The pigs usually run about freely in the villages; one very seldom sees them on a property in an enclosure of coconut palm palisades. They sleep under houses that are elevated or they burrow a pit for this purpose on the property of their owner. In the larger [656] towns of Nuku'alofa, Neiafu and Pangai keeping pigs in the settlements is forbidden by the government. There, only a few natives have pigs which they keep in special enclosures on the plantations or shut them 231 up in large hollow trees. Some years ago, keeping pigs in the 656 villages was forbidden (for hygienic reasons). The natives, however, clung so tenaciously to their old system that this regulation endangered pig breeding as a whole, hence it had to be relaxed.

231 The natives feed their pigs the cut-up meat of ripe coconuts, cooked or raw manioc roots, sweet potato leaves and food leftovers; piglets are given chiefly mashed meat of green coconuts. The pigs whose owners keep them on short rations often break into the plantations and there appease their hunger. To judge from old sources, people in former times kept better order in this respect. (Now and then in bush land there are pigs that have become wild.) Their drinking water the animals usually find for themselves (marshy pools, puddles).

● [232] Since old times the natives have known how to castrate boars (453)

231
[232]

/170 cont./

453. See J. J. Labilladière, Relation du Voyage... /Account of the voyage.../ II. p. 149.

and do so today in order to obtain more tender meat.

Chicken:

231
235
[178]
[262]

The--still mostly semi-wild--chickens have approximately the same importance in the economy of the commoners as in older times. They too are not part of the daily food, but constitute the "reserve" for various (festive) occasions /171/ when a pig need not be slaughtered and one can make do with a chicken. Most of the nobles today act in the same way, in contrast to past times. (454)

454. See, for example, W. Waldegrave, Extracts... p. 187.

Chickens are free on village properties and also on the plantations. They usually roost in trees. Thay are quite timid, especially on the plantations. (There, for feeding, they are still sometimes called out of thickets with the conch shell.) Chickens are fed the grated meat of ripe coconuts; but they find a large part of their necessary food by themselves. The natives generally pay little [262] attention to their eggs which they lay in the bush and in hidden places in the village.

Horse:

231
492
[136]

Horses were repeatedly brought to Tonga by Europeans. But it has only been in the last eight decades that the Tongans, to an increasing extent, realized how useful these animals can be to bridge the often great distances to the plantations. The natives have become quite skillfull riders, and especially the young often race over the bad [541] roads in the bush land at a bold gallop. Impromptu horse races are quite popular in some places (for example, on Tongatapu and Vava'u). The natives ride without a saddle or, instead, use an old European sack or a bundle of dried banana leaves. On such pads they frequently